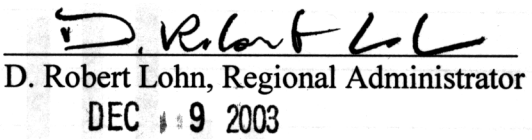
National Marine Fisheries Service
Endangered Species Act (ESA) Section 7 Consultation
Biological Opinion and Magnuson-Stevens Act Essential Fish Habitat Consultation

Action Agency:	National Marine Fisheries Service
Species/ESU Affected:	Oregon Coast Coho Salmon (*Oncorhynchus kisutch*)
Activities Considered:	Coho Salmon Fishery in Siltcoos and Tahkenitch Lakes
Consultation Conducted by:	The Salmon Recovery Division, Northwest Region, National Marine Fisheries Service Consultation Number: 2003/00782 (assoc. with NWR/4d/04/2003/002)

This document constitutes NOAA's National Marine Fisheries Service's (NMFS) biological opinion (Opinion) for a proposed Federal action that is likely to affect the listed Oregon Coast coho salmon Evolutionarily Significant Unit (ESU). The Federal action is NMFS' ESA 4(d) Rule determination on the submitted Fisheries Management and Evaluation Plan (FMEP) developed by Oregon Department of Fish and Wildlife (ODFW). NMFS concludes that this action is not likely to jeopardize the continued existence of the listed ESU. NMFS further determines that EFH for Pacific salmon will be adversely affected by the proposed fisheries, and that implementation measures described in the Evaluation and Recommended Determination document be adopted as the EFH conservation measures.

This Opinion has been prepared in accordance with section 7 of the Endangered Species Act (ESA) of 1973 as amended (16 U.S.C. 1531 *et seq*). It is based on information provided in the FMEP submitted to NMFS, NMFS' ESA 4(d) Rule Limit 4 Evaluation and Recommended Determination documents prepared for the FMEP, published and unpublished scientific information on listed salmon and steelhead in the action area, and other sources representing the best available scientific information. A complete administrative record of this consultation is on file with the Salmon Recovery Division, Roseburg, Oregon.

Approved by: 

D. Robert Lohn, Regional Administrator

DEC 19 2003

Date: _____

Attachment

SECTION 7 CONSULTATION - BIOLOGICAL OPINION

Background, Description of the Proposed Action, Affected Evolutionarily Significant Units (ESUs) and Action Area

The National Marine Fisheries Service (NMFS) published a 4(d) rule adopting regulations necessary and advisable to conserve listed Oregon Coast coho salmon (50 CFR 223.203(b); July 10, 2000, 65 FR 42422).

The following ESU may be affected by the proposed action:

- Oregon Coast coho salmon ESU; specifically, the runs returning to Siltcoos and Tahkenitch Lakes

The action area for these harvest activities includes Siltcoos and Tahkenitch Lakes. Fishing for coho salmon would not be allowed in the inlet and outlet streams of these lakes. The specific area in which each of the proposed fisheries would take place is detailed in the FMEP and summarized in the Evaluation and Recommended Determination document.

The Oregon Department of Fish and Wildlife (ODFW) has submitted a FMEP for approval under Limit 4 for a recreational fishery in Siltcoos and Tahkenitch Lakes in the Oregon Coast coho salmon ESU. The fishery, if approved, would occur on wild coho salmon returning to the lakes from October 1st through December 31st. The fishery would only occur in years when coho salmon returns are high and exceed the specified abundance criteria outlined in the FMEP. In years when fish returns were not high enough, a fishery in the lakes would not occur. The only area open to coho salmon fishing would be the lakes. The outlet stream where coho enter from the ocean and migrate to the lake would be closed to angling. The inlet streams where coho salmon spawn would also be closed to angling. The proposed bag limit for this fishery is one adult coho salmon per day, five adults per year, and one jack per day.

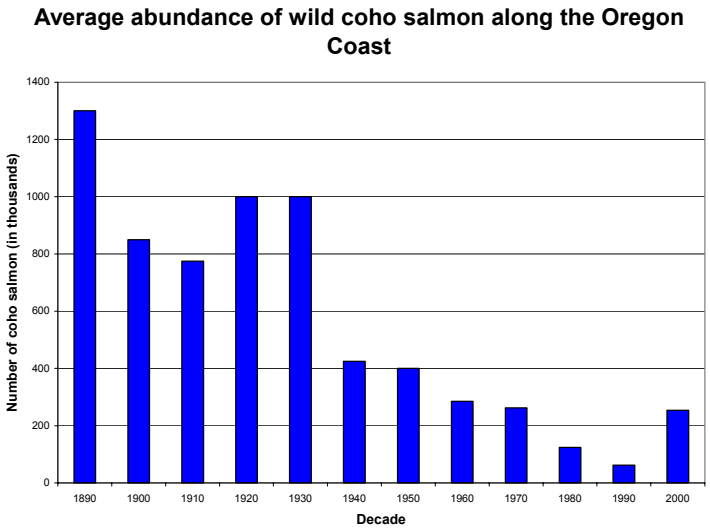


Figure 2. Historic abundance of wild coho salmon in the Oregon Coast ESU. Data provided by ODFW.

The proposed action is to approve the FMEP. The

FMEP addresses the impacts of the fishery on listed Oregon Coast coho salmon. NMFS proposes to approve the FMEP if the plan adequately addresses the criteria in Limit 4, including the requirement that implementation of the fishery would not appreciably reduce the likelihood of survival and recovery of ESA-listed coho salmon. NMFS' action of approving this FMEP would allow the ODFW to conduct the coho salmon fishery in Siltcoos and Tahkenitch Lakes in compliance with the ESA.

Affected ESUs' Current Status and Environmental Baseline

Coho salmon (*Oncorhynchus kisutch*) were historically very abundant along the Oregon Coast. The best available information suggests wild coho salmon averaged approximately one million fish in the late 1800's and early 1900's (Figure 1). Over the last several decades the abundance of wild coho salmon has declined steadily to all time lows in the mid-1990's. The Oregon Coast coho salmon Evolutionarily Significant Unit (ESU; the group of coho salmon inhabiting streams between Cape Blanco in southern Oregon to the Columbia River) was listed as a threatened species under the Endangered Species Act in 1998 (63 FR 42587, August 10, 1998).

The factors leading to the decline of Oregon Coast coho salmon are numerous and varied. The present depressed status of coho salmon along the Oregon Coast is the result of several longstanding human-induced factors such as overharvest in commercial and recreational fisheries, habitat degradation, loss of habitat, and artificial propagation. These human induced factors serve to exacerbate the adverse effects of natural environmental variability from poor ocean conditions, drought, and floods.

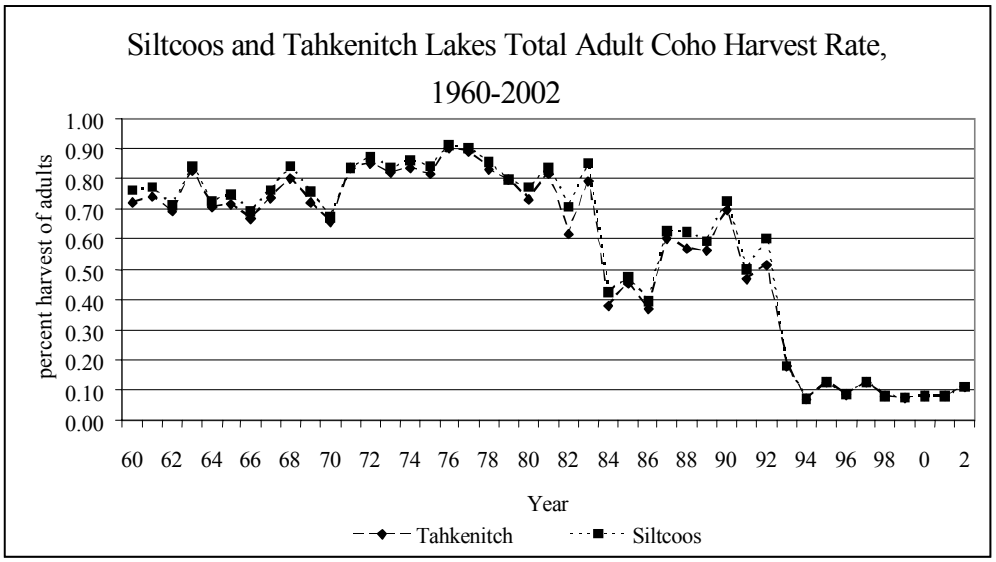


Figure 3. Cumulative harvest rates of Oregon Coast coho salmon in commercial and sport fisheries. Taken from FMEP.

Since the mid 1990's, commercial and recreational fishery impacts on Oregon Coast coho salmon have been curtailed substantially because of the poor health of the wild runs. Cumulative harvest rates on wild coho salmon were greater than 70% for decades (Figure 2). These harvest rates were not sustainable over the long term, especially in light of the degradation of spawning and rearing habitats and poor ocean survival conditions. In recent years, harvest impacts on wild coho salmon have decreased to 7% to 15% annually. Some runs of wild coho salmon have increased in recent years due to harvest impact reductions and improved environmental conditions. The runs of coho salmon in Siltcoos, Tahkenitch, and Tenmile Lakes are such cases. The number of wild coho spawners in these lake basins has been high in recent years.

Effects of the Proposed Action

In its biological opinions, NMFS analyzes the effects of the action as defined in 50 CFR 402.02. NMFS considers the estimated level of injury or mortality attributable to the collective effects of the action and any cumulative effects. NMFS also evaluates whether the action directly or indirectly is likely to destroy or adversely modify the listed species' designated critical habitat.

As discussed in the FMEP, Evaluation and Recommended Determination document, and Environmental Assessment document, a fishery would be implemented in years when the returns of coho salmon are high and exceed escapement thresholds specified in the FMEP. The goal is to have at least 3,300 and 2,200 adults spawning annually in Siltcoos and Tahkenitch Lake Basins, respectively, after any fishery occurs. These escapement levels are estimated to be the maximum sustained production level for these runs (ODFW 2003). The fishery quotas for each lake will depend upon the estimated abundance of coho salmon returning and unused impacts from the ocean fisheries. The fishery quotas are specified in the FMEP. Overall exploitation rates on these coho salmon populations from ocean and freshwater fisheries would be limited to the harvest rates specified in the Amendment 13 of PFMC's Pacific Salmon Plan (PFMC 2003). Further information on this harvest matrix is described in the FMEP. The minimum escapement thresholds for the runs in Siltcoos and Tahkenitch Lakes would likely maintain escapement sufficient to minimize deleterious genetic and demographic effects on this coho salmon population.

A creel survey would be conducted throughout the fishing season to monitor the catch of coho salmon in both lakes. The season would be closed or reduced if harvest levels are expected to exceed the maximum harvest impacts outlined in Amendment 13 or result in a level of spawners below the minimum guidelines specified in the FMEP.

Critical habitat has been designated for the affected ESU. In the Evaluation and Recommended Determination and Environmental Assessment documents, NMFS assesses the impacts on habitat for the ESU. The harvest activities will cause little, if any, habitat alteration. Specific activities that might alter habitat are associated with riparian traffic and wading activity in extremely localized areas; however, these areas are already used for other similar purposes include hunting,

hiking and camping, and non-consumptive observation of wildlife and scenery. Therefore, NMFS concludes that activities described in the FMEP will not directly or indirectly destroy or adversely modify the affected ESU's critical habitat.

Cumulative effects are those effects defined in 50 CFR 402. Future Federal actions will be subject to the ESA section 7 consultation requirements, and are therefore not considered here. Non-Federal actions that require authorization under other sections of the ESA, and not included here, will be considered in separate section 7 consultations.

Conclusion

Based on the foregoing analysis, including the evaluation of the harvest activities in the Evaluation and Recommended Determination document, NMFS concludes that the proposed federal action is not likely to jeopardize the continued existence of Oregon Coast coho salmon, or result in the destruction or adverse modification of designated critical habitat for that ESU. This conclusion is based on the relatively large returns of coho salmon observed in Siltcoos and Tahkenitch Lakes recently and expected in the future, the expectation that the population growth rate will remain positive, the intent to only open coho recreational fisheries when the populations would exceed maximum sustained production in those basins after ocean and lake fisheries are accounted for, and the management of the fisheries such that spatial distribution of the returning adults throughout the spawning areas will not be changed.

In addition, NMFS' July 2000 4(d) rule is designed to encourage activities and programs that will conserve listed species. If programs are consistent with the rule's limits, ESA take prohibitions will not apply to those programs. As discussed in the NMFS Evaluation and Recommended Determination document, the proposed coho salmon fishery in Siltcoos and Tahkenitch Lakes is consistent with the 4(d) Rule, and will provide sufficient conservation of the listed species.

Incidental Take Statement

If the proposed FMEP is approved, ESA take prohibitions will not apply to the coho salmon fishery specified in the FMEP. Therefore, any federal action associated with the fishery harvest activities described in the FMEP and the Evaluation and Recommended Determination document also will not be subject to take prohibitions. No incidental take statement has been prepared.

Reinitiation of Consultation

Reinitiation requirements are the re-evaluation and modification requirements set out in the FMEP, the Evaluation and Recommended Determination document, and in the concurrence letter to the ODFW, all of which are incorporated herein.

References

References for this consultation are those used by NMFS in the Evaluation and Recommended Determination Document, and the following:

ODFW (Oregon Department of Fish and Wildlife). 2003. Fisheries Management and Evaluation Plan. Oregon Coastal Coho, Siltcoos and Tahkenitch Lakes Coho Fishery. Salem, Oregon. November 2003.

PFMC (Pacific Fishery Management Council). 2003. Amendment 13 to the Pacific Coast Salmon Plan. Hard copies available from Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 200, Portland, Oregon 97220. Website: www.pcouncil.org/

MAGNUSON-STEVENS ACT ESSENTIAL FISH HABITAT CONSULTATION

A. Background

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a Federal fisheries management plan. Pursuant to the MSA:

- Federal agencies must consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (§305(b)(2));
- NMFS must provide conservation recommendations for any Federal or State action that would adversely affect EFH (§305(b)(4)(A));
- Federal agencies must provide a detailed response in writing to NMFS within 30 days after receiving EFH conservation recommendations. The response must include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with NMFS EFH conservation recommendations, the Federal agency must explain its reasons for not following the recommendations (§305(b)(4)(B)).

EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (MSA §3). For the purpose of interpreting this definition of EFH: Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or

growth to maturity" covers a species' full life cycle (50 CFR 600.10). Adverse effect means any impact which reduces quality and/or quantity of EFH, and may include direct (*e.g.*, contamination or physical disruption), indirect (*e.g.*, loss of prey or reduction in species fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810).

EFH consultation with NMFS is required regarding any Federal agency action that may adversely affect EFH, including actions that occur outside EFH, such as certain upstream and upslope activities.

The objectives of this EFH consultation are to determine whether the proposed action would adversely affect designated EFH and to recommend conservation measures to avoid, minimize, or otherwise offset potential adverse effects to EFH.

B. Identification of Essential Fish Habitat

Pursuant to the MSA, the Pacific Fisheries Management Council (PFMC) has designated EFH for three species of federally-managed Pacific salmon: chinook (*O. tshawytscha*); and coho (*O. kisutch*); and Puget Sound pink salmon (*O. gorbuscha*)(PFMC 1999). Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC 1999), and longstanding, naturally-impassable barriers (i.e., natural waterfalls in existence for several hundred years). Detailed descriptions and identifications of EFH for salmon are found in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (PFMC 1999). Assessment of potential adverse effects to these species' EFH from the proposed action is based, in part, on this information.

C. Proposed Action and Action Area

For this EFH consultation, the proposed actions and action area are detailed in the FMEP and summarized in the Evaluation and Recommended Determination document. The action area for these harvest activities includes Siltcoos and Tahkenitch Lakes, which includes habitat designated as essential for coho salmon. The action is the approval of the activities specified in the FMEP, to be implemented by the Oregon Department of Fish and Wildlife.

The proposed action area includes only Siltcoos and Tahkenitch Lakes. Assessment of the impacts on these species' EFH from the above proposed action is based on this information.

D. Effects of the Proposed Action

The proposed action will likely adversely affect designated EFH for coho salmon. Such effects are expected to be localized and transitory, resulting from interception of fish in the lakes during recreational fishing activities. Fish intercepted will be released unharmed; fish not intercepted in the fishery will not be affected. No adverse effects on habitat necessary for spawning, breeding, feeding, or growth to maturity are expected.

E. Conclusion

NMFS concludes that the proposed action would adversely affect designated EFH for coho salmon. This effect would be limited to interception of some coho salmon returning to Siltcoos and Tahkenitch Lakes in years when a fishery takes place. The primary effect would be a brief delay in migration to spawning areas.

F. EFH Conservation Recommendation

Pursuant to Section 305(b)(4)(A) of the MSA, NMFS is required to provide EFH conservation recommendations to Federal agencies regarding actions which may adversely affect EFH. NMFS understands that the measures described in the FMEP that will be implemented by the ODFW are applicable to designated salmon EFH and address the adverse effects. Therefore, NMFS recommends that those same Conservation Measures and Terms and Conditions be adopted as the EFH Conservation Recommendations for this consultation.

G. Statutory Response Requirement

Pursuant to the MSA (§305(b)(4)(B)) and 50 CFR 600.920(j), Federal agencies are required to provide a detailed written response to NMFS' EFH conservation recommendations within 30 days of receipt of these recommendations. The response must include a description of measures proposed to avoid, mitigate, or offset the adverse impacts of the activity on EFH. In the case of a response that is inconsistent with the EFH conservation recommendations, the response must explain the reasons for not following the recommendations, including the scientific justification for any disagreements over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects.

H. Consultation Renewal

The NMFS must reinitiate EFH consultation if the proposed actions are substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR Section 600.920(k)).